



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Starlink 10-2

**Issued:** 11 June 2024 / 1100L (1500Z)

**Valid:** 12 June 2024 / 1708 – 2108L (2108 – 13/0108Z)



**Forecast Discussion:** A stationary front is draped across North Florida this morning which in combination with an upper level trough digging across the eastern US is transporting deep tropical moisture across Florida. The Spaceport, and the remainder of the peninsula, will see very wet and unsettled weather conditions through the remainder of the week. The forecast question for both the primary launch opportunity Wednesday afternoon and backup on Thursday remains exactly where the boundary drifts to, and how quickly a developing area of low pressure sets up off the northeast Florida coast.

For Wednesday afternoon, models differ if weather for launch opportunities may be better earlier or later in the window. Even without storms in the immediate vicinity of the Spaceport, a robust mid-level jet will bring across any anvils from activity to the west that will be hard to scour out. There will be a threat for most of the LLCC through the window, though anvils will be the most likely.

The development of the aforementioned area of low pressure off the coast will play a factor in the forecast for Thursday. Quicker development may wrap some mid and upper level dry air around the feature and into the state with a little less cloud cover, though this presents a better opportunity for heating and more robust afternoon storm development that would offset this. For now, a consensus suggests storm chances in the vicinity remain high with anvil continuing to be the largest threat.

Probability of Violating Weather Constraints <sup>1</sup>																																			
<b>Launch Day</b>	<b>95%</b> <b>Primary Concerns:</b> Anvil Cloud Rules, Cumulus Cloud Rule, Surface Electric Fields Rule																																		
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<p>1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch window.</p> <p>2. Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.</p> <p>See <a href="https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf">https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf</a> for more information</p>																																			
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